

IN THE CLAIMS

1. (currently amended) A method of using at least one filter to receive ~~receiving~~ signals from an antenna by changing filtering characteristics, said method comprising:

changing filtering characteristics on a main signal path as a function of at least one amplitude on another signal path (18) coupled to the main signal path where the main signal path and the other signal path have a frequency band of operation and where said amplitude is in an adjacent band relative to a the frequency band of operation on said main signal path.

2. (original) The method of claim 1 wherein said changing comprises:

using an amplitude in said frequency band of operation on said main signal path to change said filtering characteristics on said main signal path.

3. (currently amended) The method of claim 1 further comprising:

receiving analog signals on said main signal path;

producing a replica of said analog signals on the other signal path where the other signal path is a band edge detection path;

dividing said analog signals on said band edge detection path onto an upper edge detection path and a lower edge detection path;

producing an upper edge amplitude for said analog signals at an upper edge relative to said frequency band of operation on said upper edge detection path and a lower edge amplitude for said analog signals at a lower edge relative to said frequency band of operation on said lower edge detection path.

4. (currently amended) The method of claim 2 further comprising:

providing a replica of said ~~analog~~ signals on a detection path;
producing an amplitude for said ~~analog~~ signals in said frequency band of
operation on said detection path; and
changing said filtering characteristics ~~of said filter~~ on said main signal path based
on a comparison between said at least one amplitude for said adjacent band and said
amplitude for said frequency band of operation.

5. (original) The method of claim 1 wherein said changing comprises:

AI switching as a function of said at least one amplitude for said adjacent band
between a plurality of filters having different filtering characteristics.

6. (cancelled)

7. (original) The method of claim 1 wherein said changing comprises:

narrowing a bandwidth for a filter on said main signal path to attenuate signals on
at least one band edge of said frequency band of operation.

8. (currently amended) A method of receiving signals, said method comprising:

changing filtering characteristics on a main signal path ~~at~~ as a function of at least
one band edge of a frequency band of operation of a receiver depending on at least one
amplitude for signals not under the control of said receiver.

9. (original) The method of claim 8 wherein said changing comprises:

using an amplitude of said frequency band of operation on said main signal path.

10. (currently amended) The method of claim 8 further comprising:

receiving analog signals on said main signal path;

producing a replica of said analog signals on the other signal path where the other signal path is a band edge detection path;

dividing said analog signals on said band edge detection path onto an upper edge detection path and a lower edge detection path;

producing an upper edge amplitude for said analog signals at an upper edge relative to said frequency band of operation on said upper edge detection path and a lower edge amplitude for said analog signals at a lower edge relative to said frequency band of operation on said lower edge detection path.

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11. (currently amended) The method of claim 10 further comprising:

providing a replica of said analog signals on a detection path;

producing an amplitude for said analog signals in said frequency band of operation on said detection path; and

changing said filtering characteristics ~~of said filter~~ on said main signal path based on a comparison between said at least one amplitude for said signals not under the control of said receiver and said amplitude for said frequency band of operation.

12. (original) The method of claim 8 wherein said changing comprises:

switching as a function of said at least one amplitude for said signals not under the control of said receiver between a plurality of filters having different filtering characteristics.

13. (currently amended) The method of claim 10 wherein said receiving and producing comprises comprising:

receiving analog signals at a radio frequency on said main signal path; and

producing a replica of said radio frequency analog signals on a band edge detection path.

14. (original) The method of claim 8 wherein said changing comprises:

narrowing a bandwidth for a filter on said main signal path to attenuate signals on at least one band edge of said frequency band of operation.

15. (currently amended) A band edge amplitude reduction system for a receiver comprising:

A | a variable filter on a main signal path having a frequency band of operation; and processing circuitry changes filtering characteristics of said variable filter as a function of at least one amplitude for a frequency band ~~an~~ adjacent to the frequency band of operation and/or as a function of signals not under the control of said receiver or both.

16. (currently amended) The system of claim 15 wherein said processing circuitry changes said variable filter characteristics on said main signal path as a function of at least one amplitude for said adjacent band ~~and~~ or said signals not under the control of said receiver and an amplitude for said frequency band of operation on said main signal path.

17. (currently amended) The system of claim 15 further comprising band edge detection circuitry comprising:

a band edge detection path receives a replica of analog signals on said main signal path;

a signal divider divides said analog signals on said band edge detection path onto an upper edge detection path and a lower edge detection path; and

detection circuitry receives said signals on said upper edge detection path and said lower edge detection path and produces to said processing circuitry an upper edge amplitude for said analog signals at an upper edge relative to said frequency band of operation and a lower edge amplitude for said analog signals at a lower edge relative to said frequency band of operation.

18. (currently amended) The system of claim 16 further comprising:

a detection path receives a replica of said analog signals from said main signal path;

A1 detection circuitry receives said analog signals from said detection path and produces an amplitude for said analog signals in said frequency band of operation on said detection path; and

said processing circuitry changes said filtering characteristics of said filter on said main signal path based on a comparison between said at least one amplitude for said adjacent band ~~and/or~~ said signals not under the control of said receiver and said amplitude for said frequency band of operation.

19. (currently amended) The system of claim 15 wherein said processing circuitry produces control signals to change said filtering characteristics ~~of said variable switch~~ by switching between a plurality of filters having different filtering characteristics as a function of said at least one amplitude for said adjacent band ~~and/or~~ said signals not under the control of said receiver.

20. (original) The system of claim 15 wherein said processing circuitry produces control signals to narrow a bandwidth for said variable filter on said main signal path to attenuate signals on at least one band edge of said frequency band of operation.